



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		)	Confirmation No.: 7183			
ARTLEY et al.		)	Examiner:	Boyd, Jennifer A.		
Serial	No.: <b>10/022,959</b>	)	Art Unit	1771		
Filed:	December 18, 2001	)	Docket No.:	. T117 9	0001	
For:	POLYETHYLENE GLYCOL SATU	RATED	SUBSTRATE	AND	METHOD OF	:
MAKII	NG					

## **DECLARATION UNDER 37 C.F.R. 1.132**

I, Thomas E. Lister, of Black River Falls, Wisconsin state the following as true:

I am one of the co-inventors of the claimed subject matter in the abovereferenced application.

The present application relates to a method of manufacturing a polyethylene glycol treated fabric. The method includes exposing a fabric to a polyethylene glycol formulation having both an acid catalysis and a resin. The treated fabric is then heated and cured to initiate a catalytic reaction for bonding the polyethylene glycol formulation to the fabric. The bonded fabric is then washed or neutralized to a pH of between about 6.5 and about 7.5 and then dried. The neutralization step is critical given that an acid catalyst is used to initiate the PEG reaction and any remaining acid residue hydrolyzes causing a reversal of the PEG reaction.

I have read Jack Artley's Declaration. Shortly after Jack was licensed for use of the Vigo patents I negotiated a license for the same through the United States Department of Agriculture for exclusive world-wide license rights to the technology for textiles to be used in a wide variety of consumer goods.

My first commercialization effort through my company, Wisconsin Global Technologies, Ltd., was the application of the technology to fleece material to be used by a Maine-based slipper company - Supreme Slipper owned by Sam Smith. We arranged for application of the technology pursuant to Vigo's patented process to be accomplished at Specialty Shearing, a Greenville, South Carolina company. We followed the Vigo protocols including the normal laundering which was recommended after application and curing. After the goods were given a final dry they were, as Jack Artley has described, somewhat boardy and stiff and had a waxy feel. The roll goods were packaged and sealed in plastic shipping material. Within days thereafter the packages contained pooled liquid which had obviously leached from the treated material. There was also a strong acetic odor noted in the packages. This problem was brought to the attention of Dr. Vigo in a memorandum from my company's office dated a copy of which is attached. No explanation was given by Dr. Vigo or the USDA. I spent months thereafter working with the same North Carolina

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textile manufacturer described in Mr. Artley's declaration addressing the multiple problems that we encountered utilizing Vigo's invention and his protocols.

I had materials tested and discovered that the pH level of the goods after washing was extremely low. In discussing the phenomenon of the reaction reversal with chemical experts, the suspicion was raised that once treated materials were afforded an opportunity to "normalize" to ambient relative humidity; that, enough water was being absorbed by the material to react with the acidic residue and cause a reversal of the reaction. Having a fairly extensive chemical background from college training, I suggested that we experiment utilizing a strong basic solution to effectuate neutralization. We initially utilized sodium bicarbonate and later went to soda ash and currently we utilize yet another neutralization chemistry. I brought our remedy to the attention of Dr. Vigo and his assistant Gary Danna and, in fact, at my request Mr. Danna assisted us with efforts at benchmarking solution pH levels and exposure times.

Dated: April 21, 2006

Thomas E. Lister

WISCONSIN GLOBAL TECHNOLOGIES, LTD.

920 Fillmore St., P.O. Box 370 Black River Falls, WI 54615

FAX memo by UPS

To: Gary Ty From: Beth Hillker

CONFIDENTIAL

Date:

noon CST

Carylly: Please refer to the enclosed two samples and their attached thermal data sheets. notice the odor and leaching of the two Samples. This is somewhat indicative of the problems Sam Smith and specialty Shearing experienced recently. I came across these samples independent of San or Specialty. Jan or specimy.

Please notify us as to-who tested

These samples was finish applied by USDA, Specialty or whom (3) ph level of two' samples, @ any other relevant into you may have on These samples. I have other samples with same problem. They have been in plastic for 1 month at WGT offices-and the June. Sample # 1-69-65-Inn in addl. plastic you's since June.

Exhibit 1

Thank you'

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